UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/829,887	04/10/2001	Stephen E. Mead	A62-26548-US (66180.3000)	8547

7590 06/16/2005	EXAMINER	
Honeywell International, Inc	ESCALANTE, OVIDIO	
Law Department AB2		
P.O. Box 2245	ART UNIT	PAPER NUMBER
Morristown, NJ 07962-9806	2645	

DATE MAILED: 06/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/829,887	MEAD ET AL.
	Examiner	Art Unit	
	Ovidio Escalante	2645	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/28/05*.

2a)☒ This action is **FINAL.**   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,10-17,21-35,39,40,42-46,48-54,58-66 and 69-73* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,10-17,21-35,39,40,42-46,48-54,58-66 and 69-73* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is in response to applicant's amendment filed on February 28, 2005. **Claims**

1-7,10-17,21-35,39,40,42-46,48-54,58-66,69-73 are now pending in the present application.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-7,10-11,13-6,21-27,29-34,69-71 and 73 are rejected under 35 U.S.C. 102(e) as

being anticipated by Bastian et al. US Patent 6,757,712.

Regarding claim 1, Bastian teaches an e-mail system for use by a plurality of passengers

in a vehicle, (abstract), each passenger having access to a terminal, (col. 7, lines 14-27), the e-

mail system comprising:

a first server (20) located on said vehicle, wherein said first server is configured to

transport e-mail between said first server and said terminal, (col. 7, lines 28-35; col. 14, lines 52-

64);

a second server external to said vehicle, wherein said second server is configured to

transport e-mail between said second server and a data network, (col. 7, lines 36-62; fig. 1; col.

8, lines 10-38); and

a communications system (80; fig. 1) configured to operate across a plurality of wireless

connections to thereby wirelessly transfer e-mail between said first server and said second server,

while the vehicle is in motion, (col. 2, lines 24-40), wherein the plurality of wireless connections

comprises a satellite connection and a radio-based connection each having at least one of a

plurality of transfer modes for transferring email between the first server and the second server,

(col. 2,lines 24-34; communication occurs from a <u>selection</u> of one or <u>more</u> wireless links) and

wherein the communication system is further configured to combine e-mail from the plurality of

passengers into a storage queue and to transfer e-mail in the storage queue (col. 12, lines 42-47)

using each of the plurality of transfer modes (delay or no delay - col. 12, lines 42-52) to

minimize the overall cost of operating the e-mail system, (col. 2, lines 24-40; connection is

established based on the relative cost of each link).

Regarding claims 2 and 7, Bastian, as applied to claim 1 and 4, teaches said

communications system is configured to deliver an e-mail offer to said terminal, (col. 14, lines

40-64); and

said communications system is configured to selectively transfer e-mail messages to said

first server based upon requests from one of said passengers in response to said e-mail offer, (col.

14, lines 45-64).

Regarding claim 3, Bastian, as applied to claim 2, teaches wherein said e-mail offer

comprises a subject header identifying an e-mail available for upload, an indication of who sent

said e-mail, and a price for delivering said e-mail to said terminal, (col. 5, lines 24-36; col. 14,

lines 45-64).

Regarding claim 4, Bastian, as applied to claim 1, teaches said terminal is a laptop

computer (col. 3, lines 22-33; col. 9, lines 13-20) configured with information identifying a home

e-mail server, (col. 14, lines 15-21);

said communications system is further configured to route e-mail to and from said laptop

computer through said first server regardless of said laptop computer configuration; and

said first server emulates said home e-mail server, (col. 13, lines 13-25).

Regarding claim 5, Bastian, as applied to claim 4, teaches said second server is

configured to periodically poll said home e-mail server for inbox messages, (col. 8, lines 10-33).

Regarding claim 6, Bastian, as applied to claim 4, teaches wherein said second server is

configured to receive e-mail forwarded from said home e-mail server, (col. 8, lines 10-38; col.

14, lines 15-21).

Regarding claim 10, Bastian, as applied to claim 1, teaches said communication system

is further configured to select one of a plurality of wireless communication modes based on

mode selection criteria, (col. 2, lines 24-40; col. 3, lines 9-27).

Regarding claim 11, Bastian, as applied to claim 10, teaches wherein said mode selection

criteria comprises an increase data throughput, (col. 2, lines 24-40; col. 14, lines 52-64).

Regarding claim 13, Bastian, as applied to claim 10, teaches wherein said mode selection

criteria comprises a transmission cost associated with said wireless communication mode, (col.

3, lines 9-27; col. 14, lines 52-64).

Regarding claim 14, Bastian, as applied to claim 10 teaches wherein said mode selection

criteria comprises an amount a user is willing to pay, (col. 5, lines 24-46; col. 14, lines 52-64).

Regarding claim 15, Bastian, as applied to claim 10, teaches wherein said mode selection

criteria comprises a time since a last transfer of data, (col. 7, lines 51-62).

Regarding claim 16, Bastian, as applied to claim 10, teaches placing e-mail data in a

queue to be sent and received in batches, (col. 12, lines 37-47).

Regarding claim 21, Bastian, as applied to claim 10, teaches wherein said wireless communication mode transfers compressed data, (col. 4, lines 50-55).

Regarding claim 22, Bastian, as applied to claim 10, teaches wherein said wireless communication mode transfers encrypted data, (col. 14, lines 19-40).

Regarding claim 23, Bastian, as applied to claim 1, teaches a vehicle data network configured to transport an e-mail message between said terminal and said first server, (col. 7, lines 14-27).

Regarding claim 24, Bastian, as applied to claim 23, teaches wherein said vehicle data network comprises a World Wide Web server, (col. 7, lines 29-33).

Regarding claim 25, Bastian, as applied to claim 23 teaches wherein said vehicle data network comprises an email server emulating an e-mail server identified by said passenger, (col. 7, lines 39-62; col. 14, lines 19-35).

Regarding claim 26, Bastian, as applied to claim 1, teaches wherein said terminal communicates with said first server via a modem interface unit, (col. 1, lines 53-67; col. 17, lines 41-55).

Regarding claim 27, Bastian, as applied to claim 1, teaches wherein said terminal communicates with said first server via an in-flight entertainment system, (col. 15, lines 49-65).

Regarding claim 29, Bastian, as applied to claim 2, teaches wherein said terminal comprises a kiosk, (col. 15, line 49-col. 16, line 5).

Regarding claim 30, Bastian, as applied to claim 2, teaches wherein said terminal comprises a laptop computer, (col. 3, lines 28-33; col. 9, lines 13-32).

Regarding claim 31, Bastian, as applied to claim 2, teaches wherein said terminal comprises a keyboard, (col. 9, lines 13-32).

Regarding claim 32, Bastian, as applied to claim 2, teaches wherein said terminal comprises a personal digital assistant, (col. 9, lines 13-32; col. 3, lines 28-33).

Regarding claim 33, Bastian, as applied to claim 2, teaches wherein said second server is further configured to provide e-mail accounts for said users, (col. 9, lines 13-32).

Regarding claim 34, Bastian, as applied to claim 2, teaches wherein said vehicle is an airplane, (col. 9, lines 13-32; fig. 1).

Regarding claim 69, Bastian teaches a method of minimizing the overall cost of transferring a plurality of messages between an airborne server and a terrestrial server, (col. 2, lines 14-34), the method comprising the steps of:

combining at least a portion of the plurality of messages from a plurality of customers into a storage queue, (col. 12, lines 37-47);

selecting one of a plurality of operating modes for transferring each of the plurality of messages in a storage queue, (col. 2, lines 24-40), wherein the plurality of operating modes comprises an immediate mode having a first cost and a batch mode transfer mode having a second cost that is lower than the first cost, (col. 2, lines 24-40); and

transferring the messages in the queue using each of the plurality of operating modes in a manner that minimizes the overall cost of transferring the plurality of messages in the storage queue, (col. 12, lines 37-47).

Regarding claim 70, Bastian, as applied to claim 69, teaches charging a fee to the user

for transferring the e-mail message, wherein the fee for using the immediate mode is greater than

the fee for using the batch mode, (col. 3, lines 24-36).

Regarding claim 71, Bastian, as applied to claim 69, teaches considering user criteria in

selecting the one of the plurality of operating modes, (col. 3, lines 24-56; col. 14, lines 52-64).

Regarding claim 73, Bastian as applied to claim 71, teaches wherein the user criteria

comprises a cost of sending the message, (col. 3, lines 24-36; col. 14, lines 52-64).

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

5.   The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness
        or nonobviousness.

6.   Claims 12,17,28 and 72 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Bastian in view of Wright et al. US Patent 6,173,159.

Regarding claims 12,17,28 and 72, while Bastian teaches of mode selection criteria

Bastian does not specifically teach wherein the mode selection comprises an urgency of the

message of the amount of data accumulated.

In the same field of endeavor, Wright teaches that it was well known in the art to have

mode selection criteria which is based on the importance of a message and the amount of data,

(col. 5, lines 59-65; col. 11, lines 26-38). Wright also wherein a terminal (PC's in cabin)

communicates with a first server via a wireless interface unit, (col. 10, lines 6-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the system of Bastian by having the mode selection being based

on urgency and the amount of data in the queue as well as using a wireless interface unit as

taught by Wright so that the terminal can communicate with the server at a higher bandwidth and

so that important messages can be sent first. This will allow a user to send priority e-mail

messages if they are determined to be urgent.

7.   Claims 35,39-40,43-46,48-54,58-66 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Bastian et al. US Patent 6,757,712 in view of Lundberg et al. US Patent

6,760,757.

Regarding claim 35, Bastian teaches a method of transporting a plurality of e-mail

messages between a server on a data network and a plurality of terminals on a vehicle (aircraft),

(col. 7, lines 14-27), the method comprising the steps of:

receiving each of the plurality of message from the plurality of terminals in a storage

queue on said vehicle, (col. 7, lines 28-35; col. 14, lines 52-64);

selecting a wireless transmission mode for the each of the plurality of messages, (col. 2, lines 24-40) from a batch mode having a first cost and an intermediate mode having a second cost that is greater than the first cost, (col. 14, lines 52-64), and selecting the wireless transmission mode for the message between the batch mode and the intermediate mode in a manner that minimizes the overall cost of transporting the plurality of messages stored in the storage queue, (col. 2, lines 24-40; col. 12, lines 42-52); and

transporting each of the plurality of messages between said storage queue and said server using each of the selected transmission modes to thereby minimize the overall cost of transporting the plurality of messages stored in the storage queue, (col. 7, lines 36-62; col. 8, lines 10-38).

While Bastian teaches of allowing a user to immediately send an e-mail for a fee, Bastian does not specifically teach of determining a priority of the message and sending the message in an immediate mode of the wireless transmission.

In the same field of endeavor, Lundberg teaches of an in-flight e-mail system which determines a priority of each of a plurality of messages and wherein the wireless transmission mode is selected to be the immediate mode if the message is an urgent message, and otherwise placing the message into a storage queue for later transmission, (col. 4, lines 43-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Lundberg by determining if the priority of the message as taught by Lundberg to that important message can immediately be sent to their destination.

Regarding claim 39, Bastian, as applied to claim 35, teaches said communication system is further configured to select one of a plurality of wireless communication modes based on mode selection criteria, (col. 2, lines 24-40).

Regarding claim 40, Bastian, as applied to claim 39, teaches wherein said mode selection criteria comprises an increase data throughput, (col. 2, lines 24-40; col. 14, lines 52-64).

Regarding claim 43, Bastian, as applied to claim 39, teaches wherein said mode selection criteria comprises a transmission cost associated with said wireless communication mode, (col. 14, lines 52-64).

Regarding claim 44, Bastian, as applied to claim 39, teaches wherein said mode selection criteria comprises an amount a user is willing to pay, (col. 5, lines 24-36; col. 14, lines 52-64).

Regarding claim 45, Bastian, as applied to claim 39, teaches wherein said mode selection criteria comprises a time since a last transfer of data, (col. 7, lines 51-62).

Regarding claim 46, Bastian, as applied to claim 39, teaches placing e-mail data in a queue to be sent and received in batches when operating in a batch mode and determining when to initiate said communication mode, (col. 12, lines 37-47).

Regarding claim 48, Bastian, as applied to claim 35, teaches wherein said step transporting e-mail between said second server and a data network further comprise an e-mail retrieval step wherein an e-mail message is transmitted to said second server, (col. 7, lines 14-27).

Regarding claim 49, Bastian, as applied to claim 49, teaches wherein said e-mail retrieval step further comprises the step of polling a home e-mail server by said second server

and retrieving said e-mail message from said home e-mail service, (col. 8, lines 10-38; col. 14,

lines 15-21).

Regarding claim 50, Bastian, as applied to claim 48, teaches wherein said second server

is configured to receive e-mail forwarded from said home e-mail server, (col. 8, lines 10-38).

Regarding claim 51, Bastian, as applied to claim 48, teaches the step of establishing an e-

mail account for said user, (col. 9, lines 13-32).

Regarding claim 52, Bastian, as applied to claim 51, teaches the step of receiving an e-

mail message sent to said e-mail account, (col. 8, lines 10-38; col. 14, lines 15-21).

Regarding claim 53, Bastian, as applied to claim 48, teaches wherein said step of

transporting e-mail between said second server and said first server further comprises the step of

providing an e-mail offer so aid terminal, (col. 14, lines 40-64);

the step of receiving a request to upload a selected e-mail message, (col. 14, lines 45-64);

and

the step of providing said requested e-mail message to said terminal, (col. 14, lines 45-

64).

Regarding claim 54, Bastian, as applied to claim 53, teaches wherein said e-mail offer

comprises a subject header identifying an e-mail available for upload, an indication of who sent

said e-mail, and a price for delivering said e-mail to said terminal, (col. 14, lines 45-64).

Regarding claim 58, Bastian, as applied to claim 39, teaches wherein said wireless

communication mode transfers compressed data, (col. 5, lines 53-55).

Regarding claim 59, Bastian, as applied to claim 39, teaches wherein said wireless

communication mode transfers encrypted data, (col. 6, lines 10-31).

Regarding claim 60, Bastian, as applied to claim 35, teaches said terminal is a laptop

computer (col. 3, lines 22-33; col. 9, lines 13-20) configured with information identifying a home

e-mail server, (col. 14, lines 15-21);

said communications system is further configured to route e-mail to and from said laptop

computer through said first server regardless of said laptop computer configuration, (col. 13,

lines (13-25); and

said first server emulates said home e-mail server, (col. 13, lines 13-25).

Regarding claim 61, Bastian, as applied to claim 35, teaches wherein said vehicle data

network comprises a World Wide Web server, (col. 5, lines 61-67).

Regarding claim 62, Bastian, as applied to claim 35 teaches wherein said vehicle data

network comprises an email server emulating an e-mail server identified by said passenger, (col.

7, lines 39-62).

Regarding claim 63, Bastian, as applied to claim 35, teaches wherein said terminal

communicates with said first server via a modem interface unit, (col. 1, lines 53-67; col. 17, lines

41-55).

Regarding claims 64-66, Bastian teaches a digital storage medium having computer-

executable instructions stored thereon, wherein said computer-executable instructions are

operable to execute the method of claims 35,39,53, (abstract; col. 9 lines 13-31).

8.   Claim 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bastian in view

of Lundberg and further in view of Wright et al. US Patent 6,173,159.

Regarding claim 42, while Bastian teaches of mode selection criteria Bastian does not

specifically teach wherein the mode selection is an amount of data accumulated.

Wright teaches that it was well known in the art to have mode selection criteria which is based on the importance of a message and the amount of data, (col. 5, lines 59-65; col. 11, lines 26-38). Wright also wherein a terminal (PC's in cabin) communicates with a first server via a wireless interface unit, (col. 10, lines 6-19).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Bastian and Lundberg by having the mode selection being based on the amount of data in the queue as well as using a wireless interface unit as taught by Wright so that the terminal can communicate with the server at a higher bandwidth.

Response to Arguments

9.   Applicant's arguments with respect to claims **1-7,10-17,21-35,39,40,42-46,48-54,58-66,69-73** have been considered but are moot in view of the new ground(s) of rejection.

10.   Applicant's arguments filed February 28, 2005 have been fully considered but they are not persuasive.

While Applicant's amendment necessitated the new grounds of rejection, the Examiner would like to respond to Applicant's arguments.

Applicant contends that no reference discloses at least transferring messages in a queue using each of a plurality of wireless connections in a manner that minimizes the overall cost of operating the e-mail system. The Examiner respectfully disagrees.

The claims, as amended, require using each of the plurality of transfer modes to minimize the overall cost of operating the system. The claims recite at least two types of wireless connections and each connection has at least one of a plurality of transfer modes, (the Examiner notes that for claim 1, the same transfer mode could apply to both of the connections). Bastian

teaches that the wireless connection is selected based on the cost of each link so that the cost of

using the system can be less. In col. 14, lines 52-64, Bastian teaches of charging the user for

using a selected line due to the relative cost of using the selected line. In general col. 14,

describes how the system decides whether to forward certain attachments to a user based on

available bandwidth and time. The Examiner notes that since the system is charging the user to

receive the attachment via the select line whereas other users who opt out of receiving the

attachments will not get charged for the transmission when they use an alternative selective link

at a later time, then cost is a factor in which link is selected for transferring messages from the

aircraft to the ground server.

The Applicant further argues that Bastian does not disclose the concept of minimizing the

overall cost of the email since the reference solely relates to the consideration of the relative

costs for each link i.e. the reference only describes the selection of a single link based upon the

cost of the selected link with respect to the other link and not the idea of transferring messages

using each of the available links in a manner that minimizes the overall cost of the system. The

Examiner respectfully disagrees.

As shown above, cost is considered by Bastian since Bastian discloses of delaying

transmission of messages so that a less costly method of transferring messages can be used.

Bastian also teaches that based on the users desire, this can be overridden and the more

expensive transfer mode can be selected.

The Examiner respectfully asks Applicants to hold a telephone conference with the

Examiner to resolve any issues or possible suggestions for clarifying claim language.

Conclusion

11.   Applicant's amendment necessitated the new ground(s) of rejection presented in this

Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

12.   Any response to this action should be mailed to:

> Commissioner for Patents
> P.O. Box 1450
> Alexandria, Virginia 22313-1450

or faxed to:

> (703) 872-9306, (for formal communications intended for entry)

Or:
> (571) 273-7537, (for informal or draft communications, please label
> "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to:

> Customer Service Window
> Randolph Building
> 401 Dulany Street
> Alexandria, VA 22314

13.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ovidio Escalante whose telephone number is 571-272-7537. The

examiner can normally be reached on M-Th from 6:30 to 4:00. The examiner can also be

reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Fan S Tsang can be reached on 571-272-7547. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

OVIDIO ESCALANTE
PATENT EXAMINER

Ovidio Escalante
Examiner
Group 2645
June 13, 2005

O.E./oe